## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

2002-289274

(43)Date of publication of application: 04.10.2002

(51)Int.Cl.

H01M 14/00

H01L 31/04

(21)Application number: 2001-089684 (71)Applicant: TOYOTA CENTRAL RES &

**DEV LAB INC** 

AISIN SEIKI CO LTD

(22)Date of filing:

27.03.2001

(72)Inventor:

TAKEDA YASUHIKO HIGUCHI KAZUO INABA TADASHI AZUMA HIROZUMI MOTOHIRO TOMOMI SANO TOSHIYUKI

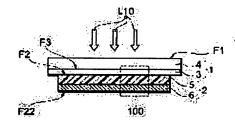
NAKAJIMA JUNJI TOYODA TATSUO

## (54) PHOTOELECTRODE AND PIGMENT SENSITIZED SOLAR CELL COMPRISING IT

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a photoelectrode having an excellent incident light utilization rate and pigment sensitized solar cell having excellent energy conversion efficiency.

SOLUTION: This photoelectrode 10 comprises a semiconductor electrode 2 having a light receiving surface F2, and a transparent electrode 1 arranged close on the light receiving surface. The semiconductor electrode has a light scattering layer 6 containing bar and/or plate metal oxide particles to scatter light reflected from the light receiving surface. The bar metal oxide particles have a diameter of 40-200 nm and an aspect ratio of 2.5 or larger. The plate metal oxide particles have a diameter of 40-200 nm and aspect ratio of 2.5 or larger.



## **LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]